

As many as 800 million people worldwide are involved in urban or peri-urban agriculture. Although urban farming is an ancient strategy for feeding city dwellers, the dramatic increase in the rate of urbanization and the size of cities during the 20th century gives urban agriculture a new significance for food security and poverty alleviation. Half the world's population now lives in towns or cities. By 2020, nearly two billion more people will be urban dwellers, increasing the threat to food security, the urban environment and quality of life.

These trends are particularly evident in the South. Eight of the nine cities expected to have more than 20 million people by 2020 are in Asia, Africa or Latin America. With food insecurity and unemployment expected to worsen, urban and peri-urban agriculture will be an increasingly important livelihood option for the urban poor.

The response

The Strategic Initiative on Urban and Peri-urban Agriculture (SIUPA) was launched in 1999 by the Consultative Group on International Agricultural Research (CGIAR) in response to growing urbanization and increased dependence of city dwellers on farming. SIUPA's goals are to:

- contribute to increased food security, improved nutritional status and higher incomes of urban and peri-urban farmers
- reduce the negative environmental impact of urban and peri-urban agriculture and enhance its positive ecological potential
- establish the perception of urban and peri-urban agriculture as a positive, productive and essential component of sustainable cities

In collaboration with the many national and international efforts that have started in recent years to address the issue of urban and peri-urban agriculture, SIUPA is establishing, in regional sites, a set of research activities collectively known as *Urban Harvest*. This is the means through which the CGIAR's international agricultural research centers

(IARCs) will coordinate and expand research support to urban farming.

An early task of SIUPA has been to review current CGIAR research investment in urban agriculture. Different IARCs are already working in several areas, including: technology and policy aspects of urban agriculture and nutrition; enhanced efficiency and sustainability of peri-urban vegetable production systems; health impacts of the use of urban waste water in agriculture; and the development of sustainable peri-urban agro-processing and livestock enterprises.

Mapping the conceptual neighborhood

The first Stakeholder Meeting of SIUPA was held in Hanoi,

Vietnam, in June 2000. Representatives of IARCs and participants from other international and national urban agriculture support efforts jointly developed a conceptual framework for SIUPA, based on the fundamental CGIAR goals of food security, alleviation of poverty and sustainable management of the environment. There are four research themes:

- urban and peri-urban production/supply of perishable and processed products
- uban agriculture and livelihoods
- environment and health issues
- agricultural and non-agricultural uses of urban and peri-urban resources

Each research theme can be approached at three different empirical levels: household organization and dynamics; institutional relationships and issues; and policy. Specific research questions can be formulated pertaining to the four themes and the three levels.

Several issues run through the research questions in this matrix. Gender roles in urban agriculture is one example; women are often the main urban farmers, a role they must juggle with other domestic responsibilities. Considerable expertise already exists in the CGIAR in gender analysis and this will be deployed in the program. Another crucial cross-cutting issue is the potential contribution of urban agriculture to acute

crisis mitigation through the application of specialized 'emergency technologies', such as rapid seed production methods and use of nutrition-rich species and varieties.

Program implementation

Urban Harvest activities will be undertaken through the establishment of regional pilot sites in Africa, Asia and Latin America. The first pilot site was established in Hanoi by an Action Plan Development Workshop held there in June 2000, immediately following the Stakeholder Meeting. A similar workshop for Sub-Saharan Africa will be held towards the end of 2000, to establish a pilot site in East or Central Africa. Workshops to establish sites in South Asia and Latin America will take place early in 2001. The research partnerships established in the pilot sites will help deepen our understanding of urban and peri-urban agriculture and offer opportunities for cross-learning.

Research support strategies

A key criterion for selection of pilot sites is the current research presence of CGIAR and other institutions offering the opportunity to 'add value' to these efforts through linking them together. For example, several CGIAR and international research projects have been working independently with Vietnamese institutions on vegetable production systems, pigraising and pig-feed quality improvement, sustainable microenterprise development and assessment of markets for starch products in the peri-urban areas of Hanoi. Many of these components are empirically connected through crop-livestock systems, recycling of byproducts and marketing and credit relations, so linking them can offer the opportunity to add value and benefits to the overall functioning and sustainability of Hanoi's peri-urban agriculture.

The Action Plan Development Workshop for the Hanoi pilot site identified eight potential linking activities within the four research themes:

Production/supply of perishable and processed products

- agro-environmental zoning for perishable and processed products
- quality assessment of perishable food crops
- evaluation and optimization of processing and pig-raising through analysis of the dense nexus of linkages between enterprises known as 'clusters'

Livelihoods

 characterizing/understanding livelihood system dynamics

Environment and health

- using clusters to facilitate improved waste management
- enhancing management and utilization of agricultural and domestic waste

Agricultural and non-agricultural resource use

- analysis of water quality and quantity, and of user perspectives
- case studies of land conversion experiences

Seed grants are already available within SIUPA to begin work on this research agenda and complementary external funding will be sought. Based on the conceptual scheme for Urban Harvest, several other potential research initiatives were also proposed for future elaboration during the Action Plan Development Workshop. These include both new activities at pilot sites and 'comparative studies' of urban and peri-urban agriculture in other locations in the regions. These ideas will be the basis for proposal development.

Governance

The June 2000 Stakeholder Meeting in Hanoi proposed a 10-member SIUPA Steering Committee comprising six representatives from IARCs (on a rotating basis) and representatives from FAO, NGOs and the internationally established Support Group on Urban Agriculture (SGUA). The Committee will have oversight and advisory responsibilities to guide Urban Harvest as well as the task of raising awareness and helping with fund-raising.

Networking

Close networking links will be developed with other urban and peri-urban agriculture activities as part of global coordination efforts. Networking will include the formation of an Urban Harvest Contact Group (with Listserve) and later, specialist theme groups on water quality, nutrition etc. An electronic 'Town Hall Meeting' will be conducted in late 2000 to debate the outputs of the Hanoi Stakeholder Meeting. A website with links to other urban agriculture sites is under construction to provide a platform for cross-regional and cross-project interactions and information sharing.



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Science for Food, the Environment and the World's Poor